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Comparative overview and interactive systems formal models analysis

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved.The current stage of development of software is characterized by the prevalence of interactive systems which provide solution of various classes of problems on the basis of the optimum separation of functions between a user and a computational machine. The task of development of interactive systems is multiple-aspect and incorporates virtually all of the major problems in the field of programming. For its solution it is necessary to use theoretical apparatus and tools which are the technological basis for creation of modern effective interactive systems. A significant role among the main and mandatory phases of building such systems is given to selection and development of a formalized system model to streamline the system description, make it easier for its design and analysis, provide a conceptual framework to analyze its behavior and implementation. An interactive system model is a description of schemes of dialog processes and actions performed by the system. In the paper we present a specific classification and review of formal and informal models of interactive systems, as well as the tools and techniques of their building. The analysis was conducted in order to identify the most strong points of presented formalism which, according to the authors, could be useful in formulating a common approach to description of interactive systems.

Keywords

Interactive systems, System modelling